

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): An optical pickup device comprising:

a light source that irradiates light to an optical recording medium;

a focusing unit configured to focus the light emitted from the light source on the optical recording medium;

a recording area discrimination unit configured to detect a portion of the optical recording medium the light is focused on;

a diffraction unit provided between the light source and focusing unit and configured to diffract the light emitted from the light source so that zero-order light resulted from the diffraction is focused by the focusing unit on the optical recording medium while other diffracted light than the zero-order light goes to a focus shifted in an optical-axial direction not to be focused on the optical recording medium, the diffraction unit configured to vary a diffraction efficiency of the light based on the portion of the optical recording medium detected by the recording area discrimination unit; and

a light detecting unit configured to detect a portion, reflected from the optical recording medium, of the zero-order light from the diffraction unit.

Claim 2 (Previously Presented): The optical pickup device according to claim 1, wherein the diffraction unit is configured to vary an efficiency of light utilization depending upon whether signals are to be written to the optical recording medium or read from the optical recording medium.

Claim 3 (Previously Presented): The optical pickup device according to claim 1, wherein the diffraction unit is configured to vary an efficiency of light utilization depending upon the type of the optical recording medium.

Claim 4 (Previously Presented): The optical pickup device according to claim 1, wherein the diffraction unit is disposed near the light source; and divergent light emitted from the light source is incident upon the diffraction unit.

Claim 5 (Previously Presented): The optical pickup device according to claim 1, wherein the diffraction unit is formed from a transparent optical material with transparent electrodes, the transparent optical material having the birefringence thereof varied when a voltage is applied across the transparent electrodes, to thereby optically modulate of the diffraction efficiency.

Claim 6 (Previously Presented): The optical pickup device according to claim 1, wherein the diffraction unit is configured to use an acousto-optical element formed from a transparent optical material with an oscillating unit, the transparent optical material having the birefringence thereof varied when the oscillating unit generates ultrasound, to thereby optically modulate the diffraction efficiency.

Claim 7 (Previously Presented): The optical pickup device according to claim 1, wherein the diffraction unit is a phase-modulated type diffraction grating.

Claim 8 (Previously Presented): An optical disk drive that writes signals to an optical recording medium and/or reads signals recorded in the optical recording medium, the apparatus comprising:

a light source that irradiates light to an optical recording medium;

a focusing means for focusing the light emitted from the light source on the optical recording medium;

a diffraction means provided between the light source and focusing means to diffract the light emitted from the light source so that zero-order light resulted from the diffraction is focused by the focusing means on the optical recording medium while other diffracted light than the zero-order light goes to a focus shifted in an optical-axial direction not to be focused on the optical recording medium;

a light detecting means for detecting a portion, reflected from the optical recording medium, of the zero-order light from the diffraction means; and

a write/read control means for controlling the output of reading or writing light from the light source and the diffraction efficiency of the diffraction means.

Claim 9 (Previously Presented): The optical disk drive according to claim 8, wherein the diffraction means varies the efficiency of light utilization depending upon whether signals are to be written to the optical recording medium or read from the optical recording medium.

Claim 10 (Original): The optical disk drive according to claim 8, wherein the diffraction means varies the efficiency of light utilization depending upon the type of the optical recording medium.

Claim 11 (Original): The optical disk drive according to claim 8, wherein: the diffraction means is disposed near the light source; and divergent light emitted from the light source is incident upon the diffraction means.

Claim 12 (Previously Presented): The optical disk drive according to claim 8, wherein the diffraction means is formed from a transparent optical material with transparent electrodes, the transparent optical material having the birefringence thereof varied when a voltage is applied across the transparent electrodes, to thereby optically modulate of the diffraction efficiency.

Claim 13 (Previously Presented): The optical disk drive according to claim 8, wherein the diffraction means uses an acousto-optical element formed from a transparent optical material with an oscillating means, the transparent optical material having the birefringence thereof varied when the oscillating means generates ultrasound, to thereby optically modulate of the diffraction efficiency.

Claim 14 (Original): The optical disk drive according to claim 8, wherein the diffraction means is a phase-modulated type diffraction grating.

Claim 15 (Previously Presented): An optical disk drive that writes signals to an optical recording medium and/or reads signals recorded in the optical recording medium, the apparatus comprising:

- a light source configured to irradiate light to an optical recording medium;
- a focusing unit configured to focus the light emitted from the light source on the optical recording medium;

a diffraction unit provided between the light source and focusing unit and configured to diffract the light emitted from the light source so that zero-order light resulted from the diffraction is focused by the focusing unit on the optical recording medium while other diffracted light than the zero-order light goes to a focus shifted in an optical-axial direction not to be focused on the optical recording medium;

a light detecting unit configured to detect a portion, reflected from the optical recording medium, of the zero-order light from the diffraction unit; and

a write/read control unit configured to control the output of reading or writing light from the light source and the diffraction efficiency of the diffraction unit.

Claim 16 (Previously Presented): The optical disk drive according to claim 15, wherein the diffraction unit is configured to vary the efficiency of light utilization depending upon whether signals are to be written to the optical recording medium or read from the optical recording medium.

Claim 17 (Previously Presented): The optical disk drive according to claim 15, wherein the diffraction unit is configured to vary the efficiency of light utilization depending upon the type of the optical recording medium.

Claim 18 (Previously Presented): The optical disk drive according to claim 15, wherein the diffraction unit is disposed near the light source; and divergent light emitted from the light source is incident upon the diffraction unit.

Claim 19 (Previously Presented): The optical disk drive according to claim 15, wherein the diffraction unit is formed from a transparent optical material with transparent

electrodes, the transparent optical material having the birefringence thereof varied when a voltage is applied across the transparent electrodes, to thereby optically modulate the diffraction efficiency.

Claim 20 (Previously Presented): The optical disk drive according to claim 15, wherein the diffraction unit is configured to use an acousto-optical element formed from a transparent optical material with an oscillating unit, the transparent optical material having the birefringence thereof varied when the oscillating unit generates ultrasound, to thereby optically modulate the diffraction efficiency.

Claim 21 (Previously Presented): The optical disk drive according to claim 15, wherein the diffraction unit is a phase-modulated type diffraction grating.

Claim 22 (Previously Presented): An optical pickup device comprising:  
a light source that irradiates light to an optical recording medium;  
a focusing unit configured to focus the light emitted from the light source on the optical recording medium;

a diffraction unit provided between the light source and focusing unit and configured to diffract the light emitted from the light source so that zero-order light resulted from the diffraction is focused by the focusing unit on the optical recording medium while other diffracted light than the zero-order light goes to a focus shifted in an optical-axial direction not to be focused on the optical recording medium, the diffraction unit configured to use an acousto-optical element formed from a transparent optical material with an oscillating unit, the transparent optical material having the birefringence thereof varied when the oscillating unit generates ultrasound, to thereby optically modulate the diffraction efficiency; and

a light detecting unit configured to detect a portion, reflected from the optical recording medium, of the zero-order light from the diffraction unit.

Claim 23 (Currently Amended): An optical pickup device comprising:

a light source that irradiates light to an optical recording medium;

a focusing unit configured to focus the light emitted from the light source on the optical recording medium;

a recording area discrimination unit configured to detect a portion of the optical recording medium the light is focused on;

a diffraction unit provided between the light source and focusing unit and configured to diffract the light emitted from the light source so that zero-order light resulted from the diffraction is focused by the focusing unit on the optical recording medium while other diffracted light than the zero-order light goes to a focus shifted in an optical-axial direction not to be focused on the optical recording medium, the diffraction unit being a phase-modulated type diffraction grating and being controlled based on the portion detected by the recording area discrimination unit; and

a light detecting unit configured to detect a portion, reflected from the optical recording medium, of the zero-order light from the diffraction unit.